



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 1, 2008

William D. Gallo, President
AREVA Federal Systems, LLC
1102 Broadway Plaza, Suite 300
Tacoma, WA 98402-3526

SUBJECT: AMENDMENT OF CERTIFICATE OF COMPLIANCE NO. 9184 FOR
MODEL PAS-1 TRANSPORTATION PACKAGE

Dear Mr. Gallo:

As requested in your letter dated November 26, 2007, enclosed is Certificate of Compliance (CoC) No. 9184, Revision No. 7, for the Model PAS-1 transportation package. The staff's Safety Evaluation Report is also enclosed. This revision supersedes, in its entirety, CoC No. 9184, Revision No. 6, dated May 10, 2004. Changes made to the enclosed CoC are indicated by vertical lines in the margins.

Those on the attached list have been registered as users of the package under the general license provisions of 10 CFR §71.17 and 49 CFR §173.41. The approval constitutes authority to use the package for shipment of radioactive material and for the package to be shipped in accordance with the provisions of 49 CFR §173.471. Registered users may request by letter to remove their names from the Registered Users List if they no are longer users of the package.

If you have any questions regarding this certificate, please do not hesitate to contact me at (301) 492-3294.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Nelson", is written over a horizontal line.

Robert A. Nelson, Chief
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Docket No.: 71-9184
TAC No.: L24156

Enclosures: 1. CoC No. 9184, Rev No. 7
2. Safety Evaluation Report
3. Registered users list

cc w/encl 1 & 2: R. Boyle, Department of Transportation
J. M. Shuler, Department of energy
Registered Users

CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES

a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
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2. PREAMBLE

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

- | | |
|---|--|
| <p>a. ISSUED TO (Name and Address)</p> <p>AREVA Federal Services LLC
1102 Broadway Plaza, Suite 300
Tacoma, WA 98402-3526</p> | <p>b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION</p> <p>Nuclear Packaging, Inc. consolidated application
dated March 31, 1989, as supplemented.</p> |
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4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

(a) Packaging

- (1) Model No.: PAS-1
- (2) Description

The packaging consists of a primary containment vessel (20.5" OD x 23.4" OH) enclosed inside a secondary containment vessel and radiation shield (32.5" OD x 39.0" OH). The 15 milliliter water sample is contained within a undefined sample cask. Additionally, four iodine collection cartridges and four offgas vials are maintained inside the foam shoring above the sample cask. Loose vermiculite surrounds the perimeter of the sample cask to absorb the water sample should leakage occur. Completely surrounding the secondary containment vessel and radiation shield is a foam filled steel encased overpack (48.0" OD x 66.0" OH) which provides impact and thermal protection.

The primary containment vessel, which is constructed of 304 stainless steel varying in thickness from 3/4" to 1.25", is provided with double Viton O-ring seals and a sealed test port between the seals for leak testing. The assembly is secured with eight, 3/8"-16 UNC x 8" long screws.

The secondary containment vessel and radiation shield provides 0.75" thick steel and 5.1" thick lead shielding in the radial direction, 2.0" thick steel and 5.1" thick lead shielding on the bottom, and 3.5" thick steel and 4.8" thick lead shielding on the top. The lid is secured with eight, 1.0"-8 UNC x 3.0 long bolts. The lid is sealed with two Viton O-rings with a sealed test port between the seals for leak testing.

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

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5.(a) Packaging Continued

(2) Description continued

The overpack provides about 7.25" thick foam on the sides and about 13" on the top and bottom. The two halves of the overpack are held together by **eight**, 3/4"-10 UNC x 1.5" long bolts. A Neoprene gasket prevents rain water from entering the overpack. The weight of the package including a maximum sample cask **weight** of 1,375 pounds, is about 12,800 pounds.

(3) Drawings

The package is constructed in accordance with Nuclear Packaging, Inc. Drawing No. X-20-218D, Sheets 1 and 2, Rev. C.

(b) Contents

(1) Type and form of material

- (i) Radioactive material in form of liquid or gaseous samples in sample casks, cartridges and vials.
- (ii) Byproduct and activation materials as solids and process solids or resins, either dewatered, solid, or solidified in secondary containers.

(2) Maximum quantity of material per package

50 Ci of mixed fission and activation products, 15 milliliters of **liquid**, one sample cask or secondary container and four cartridges and four vials.

- 6. In addition to the requirements of Subpart G of 10 CFR Part 71, each **package** prior to first use must meet the acceptance tests and criteria specified in Section 8.1, must be maintained in accordance with Section 8.2, and must be prepared for shipment in accordance with Chapter 7.0 of the application, and the supplement dated July 8, 1994.
- 7. The package authorized by this certificate is hereby approved for use **under** the general license provisions of 10 CFR 71.17, provided the fabrication of the packaging **was** satisfactorily completed by April 1, 1999.
- 8. Revision No. 6 of this certificate may be used until December 31, 2008.
- 9. Expiration date: July 31, 2009.

**CERTIFICATE OF COMPLIANCE
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REFERENCES

Nuclear Packaging, Inc., consolidated application dated March 31, 1989.

Supplement dated: April 7, 1989.

VECTRA Technologies, Inc., supplements dated: July 8, 1994 and January 30, 1998.

Transnuclear, Inc., supplement dated January 30, 1998.

Packaging Technology, Inc., Supplement dated: April 30, 1999, March 16, 2004, and November 26, 2007.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION



Robert A. Nelson, Chief
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Date: January 1, 2008



UNITED STATES
NUCLEAR REGULATORY COMMISSION
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SAFETY EVALUATION REPORT

Docket No. 71-9184
Model No. PAS-1
Certificate of Compliance No. 9184
Revision No. 7

SUMMARY

By application dated November 26, 2007, Packaging Technology, Inc., and AREVA Federal Systems, LLC, jointly requested an amendment to Certificate of Compliance (CoC) No. 9184, for the Model No. PAS-1 transportation package. The applicants requested that this CoC be transferred from Packaging Technology, Inc., to AREVA Federal Services, LLC, effective January 1, 2008.

EVALUATION

By application dated November 26, 2007, Packaging Technology, Inc., and AREVA Federal Systems, LLC (hereinafter, AREVA), jointly requested that CoC No. 9184 for the Model No. PAS-1 transportation package be transferred from Packaging Technology, Inc., to AREVA effective January 1, 2008. The applicants stated that Packaging Technology will commence doing business as AREVA on that date. AREVA stated that it accepts responsibility for the completeness and accuracy of the statements and representations in the safety analysis report (SAR) for this docket. In addition, AREVA stated that it will maintain the CoC, SAR, and, in cases where packages have been fabricated, the quality assurance records. The staff has verified that AREVA received Quality Assurance Program Approval No. 0938, Rev 0, on October 11, 2007, as stated in its application. Therefore, the name in paragraph 3.a of the CoC was changed as requested.

Condition No. 7 was revised to delete a reference to 10 CFR 71.12, which was the previous version of the regulation, and add the requirement to authorize the use of only those packages whose fabrication was satisfactorily completed by April 1, 1999, as required by 10 CFR 71.19.(b)(1).

The certificate was revised to include Condition No. 8 which authorizes use of the previous revision of the certificate for a period of approximately one year.

CONCLUSION

The CoC has been revised to state that the CoC holder is AREVA Federal Services, LLC. This change does not affect the ability of the package to meet the requirements of 10 CFR Part 71.

Issued with CoC No. 9184, Rev. 7 on January 1, 2008.
